

Serial No.: 09/734,703

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conductive piece 41 is bent after the first conductive piece 41 was assembled to the small case body 40, as shown in FIG. 6. The second conductive piece 42 is connected to the large case body 20 through the third conductive piece 43. The large case body 20 is electrically connected to the negative electrode of the battery B. That is, the motor 1 has a structure of an earthed body. The second conductive piece 42 has a structure to be able to electrically connect to the commutator 35 through the second contact spring 45.

A "VERSION WITH MARKINGS TO SHOW CHANGES MADE" is attached hereto showing the changes made to the written description.

B. In the Claims

Please cancel claims 3, 6, 9, 11, 16, 19, 20, 24, 27, 30, 33, and 36 without prejudice or disclaimer.

Please amend claims 1, 8, 10, 12, 18, 22, 25-26, 28-29, 31-32, 34-35 and 37-38, as follows:

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1. (THREE TIMES AMENDED) A motor, comprising:
 - a motor unit having first and second electrode terminals; and
 - a cylindrical case for covering and securing the motor unit, including a large case body having a cylindrical conductive portion which is directly electrically connected to the second electrode terminal, and an insulating small case body directly provided with the first electrode terminal.
 8. (THREE TIMES AMENDED) An attachment structure for attaching a motor to a battery, comprising:
 - a motor including a motor unit having first and second electrode terminals and a cylindrical case for covering and securing the motor unit,
 - wherein the cylindrical case includes a large case body having a cylindrical conductive portion which is directly electrically connected to the second electrode terminal, and an insulating small case body directly provided with the first electrode terminal; and
 - a battery for driving the motor,
 - wherein the first electrode terminal of the motor and the cylindrical conductive portion, are each connected to corresponding electrodes of the battery through only conductive members, respectively.

Serial No.: 09/734,703

10. (THREE TIMES AMENDED) An attachment structure for attaching a motor to a battery, comprising:

a motor including a motor unit having first and second electrode terminals and a cylindrical case for covering and securing the motor unit,

wherein the cylindrical case includes a large case body having a cylindrical conductive portion which is directly electrically connected to the second electrode terminal, and an insulating small case body directly provided with the first electrode terminal; and

a battery for driving the motor,

wherein one of the first electrode terminal of the motor and the cylindrical conductive portion of the large case body is connected to a first electrode of the battery through only a conductive member, and the other of the first electrode terminal and the cylindrical conductive portion is connected to a second electrode of the battery directly.

12. (THREE TIMES AMENDED) The attachment structure as claimed in claim 8, wherein the conductive members can be brought into contact with or away from the corresponding electrodes of the battery, the first electrode terminal of the motor, or the cylindrical conductive portion.

14. (ONCE AMENDED) The attachment structure as claimed in claim 8, wherein the battery is a button-type.

17. (ONCE AMENDED) The motor as claimed in claim 1, wherein the motor unit further comprises a commutator and contact springs, and the first and second electrode terminals of the motor are electrically connected to the commutator through the contact springs.

18. (TWICE AMENDED) The motor as claimed in claim 1, wherein the large case body and the insulating small case body comprise recess portions for connecting the large case body and the insulating small case body.

21. (ONCE AMENDED) The attachment structure as claimed in claim 8, wherein the motor unit further comprises a commutator and contact springs, and the first and second electrode terminals of the motor are electrically connected to the commutator through the contact springs.

Serial No.: 09/734,703

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22. (TWICE AMENDED) The attachment structure as claimed in claim 10, wherein the conductive members can be brought into contact with or away from the first electrode of the battery, the first electrode terminal of the motor, or the cylindrical conductive portion.

23. (ONCE AMENDED) The attachment structure as claimed in claim 10, wherein the battery is a button-type.

25. (TWICE AMENDED) The attachment structure as claimed in claim 10, wherein the large case body and the insulating small case body comprise recess portions for connecting the large case body and the insulating small case body.

26. (TWICE AMENDED) A motor, comprising:
a rotor having first and second electrical terminals; and
a cylindrical case for covering and securing the rotor, including a cylindrical conductive portion electrically connected to the rotor and directly connected to the second electrical terminal of the rotor, and an end case electrically connected to the rotor and directly connected to the first electrical terminal of the rotor.

28. (ONCE AMENDED) The motor as claimed in claim 1, wherein the motor unit further comprises a rotary shaft, a commutator and a contact spring; and
the first electrode terminal passes through the insulating small case body in an approximately parallel direction to the rotary shaft, at a distance from the rotary shaft, and includes a first end which is electrically connected to the commutator through the contact spring, and a second end which projects outwardly from the insulating small case body, to be adapted to connect to an external battery directly or through a conductive member.

29 (ONCE AMENDED) The motor as claimed in claim 28, wherein the second end of the first electrode terminal is turned to form a contact head.

31. (ONCE AMENDED) The attachment structure as claimed in claim 8,
wherein the motor unit further comprises a rotary shaft, a commutator and a contact spring; and
the first electrode terminal passes through the insulating small case body in an approximately parallel direction to the rotary shaft, at a distance from the rotary shaft, and

Serial No.: 09/734,703

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includes a first end which is electrically connected to the commutator through the contact spring, and a second end which projects outwardly from the insulating small case body and is connected to a corresponding electrode of the battery through a conductive member.

32. (ONCE AMENDED) The attachment structure as claimed in claim 31, wherein the second end of the first electrode terminal is turned to form a contact head.

34. (ONCE AMENDED) The attachment structure as claimed in claim 10, wherein the motor unit further comprises a rotary shaft, a commutator and a contact spring; and
the first electrode terminal passes through the insulating small case body in an approximately parallel direction to the rotary shaft, at a distance from the rotary shaft, and includes a first end which is electrically connected to the commutator through the contact spring, and a second end which projects outwardly from the small case body and is connected to a corresponding electrode of the battery directly or through a conductive member.

35. (ONCE AMENDED) The attachment structure as claimed in claim 34, wherein the second end of the first electrode terminal is turned to form a contact head.

37. (ONCE AMENDED) The motor as claimed in claim 26, wherein the rotor further comprises a rotary shaft, a commutator and a contact spring; and

the first electrical terminal passes through the end case in an approximately parallel direction to the rotary shaft, at a distance from the rotary shaft, and includes a first end which is electrically connected to the commutator through the contact spring, and a second end which projects outwardly from the end case to be adapted to connect to an external battery directly or through a conductive member.

38. (ONCE AMENDED) The motor as claimed in claim 37, wherein the second end of the first electrical terminal is turned to form a contact head.

II. REMARKS

As noted above, certain of the claims have been canceled, and others have been

Serial No.: 09/734,703

amended further. In particular, the "first" and "second" electrodes have been corrected to better correspond to the written description.

III. CONCLUSION

In view of the foregoing actions taken by Applicants, it is believed this Preliminary Amendment places this application in condition for allowance, and therefore should be entered, and a Notice of Allowance issued for these claims.

If there are any remaining formal matters that need to be attended to in this application, it is requested that the Examiner contact the undersigned attorney at the below-identified telephone number at the Examiner's convenience.

If any additional fee is required in connection with the filing of this Response, please charge same to our Deposit Account No. 19-3935.

Respectfully submitted,

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on Jan. 2, 2003

STAAS & HALSEY

By: 

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